

ABSTRACT

An apparatus and method for fabricating a plastic optical fiber are disclosed. In the fabricating apparatus, a first container is provided to separately contain the refractive index control materials including at least a core material. The refractive index control materials have different refractive indices. A second container contains a clad material having a different refractive index from the core material. A crosshead flows down the refractive index control materials and the clad material introduced from the first and second containers by physical extrusion, while restricting the flow of the refractive index control materials and clad materials to a predetermined radius. A rotator mixes the extruded refractive index control and clad materials concentrically perpendicular to an extrusion direction.